NATIONAL ECONOMICS UNIVERSITY
NEU COLLEGE OF TECHNOLOGY
FACULTY OF INFORMATION TECHNOLOGY

PYTHON PROGRAMMING COURSE

CHAPTER 1: INTRODUCTION TO PYTHON

PRACTICE

- **Exercise 1:** Given a list of numbers, calculate the sum of all elements in the list.
- **Exercise 2:** Given a list of numbers, calculate the average, maximum, and minimum values of the elements in the list.
- **Exercise 3:** Given a list and a value entered via the keyboard, determine whether the value exists in the list.
- **Exercise 4:** Given a list and a value entered via the keyboard, determine whether the value exists in the list. If it does, return the index of its first occurrence.
- **Exercise 5:** Given a list and a value entered via the keyboard, determine whether the value exists in the list. If it does, return the index of its last occurrence.
- **Exercise 6:** Given a list and a value entered via the keyboard, count the number of times the value appears in the list.
- **Exercise 7:** Given a list and a value entered via the keyboard, if the value exists in the list, remove the element at its first occurrence.
- **Exercise 8:** Given a list and a value entered via the keyboard, remove all instances of the value from the list.
- **Exercise 9:** Given a list, create and output a set containing only the unique (non-repeating) elements of the list.
- **Exercise 10:** Given a list, reverse the order of the elements and print the reversed list.
- **Exercise 11:** Given a list of numbers, sort the elements in ascending order.
- **Exercise 12:** Given a list of numbers, sort the elements in descending order.
- **Exercise 13:** Given two lists, A and B, find and output their intersection (common elements).
- **Exercise 14:** Given two lists, A and B, find and output their union (all unique elements combined).
- **Exercise 15:** Given a list, count and display the number of occurrences of each value in the list.